UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

SEP 2 4 2013

Amanda Murphy (DPW-ENV)
NEPA Coordinator of the 99th RSC DPW
Environmental Division
5231 South Scott Plaza
Fort Dix, New Jersey 08640

Subject: Environmental Assessment, U.S. Army Reserve Proposed Military Construction Project, Bullville, New York.

Dear Ms. Murphy:

The U.S. Environmental Protection Agency (EPA), Region 2 office has reviewed the Environmental Assessment (EA) for the proposed demolition of existing structures and the construction and operation of new facilities at the SSG Fredrick J. Ill U.S. Army Reserve Center located in Bullville, New York. The proposed action includes the demolition of four buildings including a mess hall/training building, a signal shack/flammable storage building, an organizational maintenance shop, and a storage building. The action also includes the construction and operation of an administrative training building, an organizational maintenance shop, and an unheated storage building. There will also be the addition of approximately 17,335 square yards of organizational parking and roads.

The EA was thorough in its discussion of the alternatives, affected environment, and consequences of this action. We acknowledge the inclusion of language supporting the use of green infrastructure and low impact development practices and encourage the Army Reserve to integrate these practices to the fullest extent possible in the final construction plans. We also applaud the Army Reserve to committing to LEED Silver certification for the new facilities.

We encourage the Army Reserve to recycle construction and debris waste associated with the demolition of the four existing buildings wherever possible. Construction and demolition (C&D) materials consist of the debris generated during the construction, renovation, and demolition of buildings, roads, and bridges. C&D materials often contain bulky, heavy materials, such as concrete, wood, metals, glass, and salvaged building components. Reducing and recycling C&D materials conserves landfill space, reduces the environmental impact of producing new materials, creates jobs, and can reduce overall building project expenses through avoided purchase/disposal costs. Identifying C&D materials as commodities that can be utilized in new building projects avoids the need to mine virgin materials. You can learn more about recycling C&D materials by visiting EPA's Industrial Material Recycling program here:
http://www.epa.gov/epawaste/conserve/imr/cdm/index.htm

We have attached a list of Green Recommendations that we have compiled to help assist you in your efforts to create a sustainable facility in the most environmentally sound manner.

Thank you for the opportunity to comment. Should you have any questions concerning this letter please feel free to contact Stephanie Lamster of my staff at 212-637-3465.

Sincerely,

for

Grace Musumeci, Chief
Environmental Review Section

EPA Region 2 Green Recommendations

To the maximum extent possible, project managers are encouraged to utilize local and recycled materials; to recycle materials generated onsite; and to utilize technologies and fuels that minimize greenhouse gas emissions.

Further, to the extent feasible, renewable energy (including, but not limited to solar, wind, geothermal, biogas, and biomass) and energy-efficient technologies should be incorporated into the design, construction, and operation of all types of projects.

To that end, the following information and internet hyperlinks are provided for your consideration and use:

- **Multi-media green building and land design practices**
  Utilize green building practices which have multi-media benefits, including energy efficiency, water conservation (see WaterSense below), and healthy indoor air quality. Apply building rating systems and no-cost online tools and guides, such as ENERGY STAR, Portfolio Manager, Target Finder, Indoor Air Quality Package, and WaterSense for building construction. The ENERGY STAR website (see below) includes, among other things, information on new single-family homes, multi-family homes, commercial and other buildings, and schools. The website also provides an ENERGY STAR "Training Center" free of charge.

  U.S. Green Building Council (USGBC) LEED Programs and Guides: http://www.usgbc.org/

  ENERGY STAR home page: http://www.energystar.gov

  ENERGY STAR Target Finder (no-cost online tool to set energy performance targets): http://www.energystar.gov/targetfinder

  Indoor Air Quality: http://www.epa.gov/iaq

- **Water conservation and efficiency in building construction**
  Promote water conservation and efficiency through the use of water efficient products and practices. For new building construction and restoration projects, we recommend considering the use of products with the WaterSense label where appropriate. Devices receiving the EPA WaterSense label must be at least 20% more water efficient than (and must meet or exceed the performance standards of) non-labeled devices of the same type. Additionally, when possible, consider the use of WaterSense Certified Professional Irrigation Partners and WaterSense Builder Partners. These professionals use WaterSense labeled devices where appropriate, are trained in the latest water conservation practices, and use the latest water efficiency tools and technologies, including irrigation equipment and xeriscaping for landscaping and best management practices for construction in the WaterSense New Home Specifications. Visit the WaterSense website for tips on water efficiency, a WaterSense labeled product search tool, a list of WaterSense Partners, access to the Water Budget Tool at: http://www.epa.gov/watersense/

  In addition to using WaterSense labeled products and certified professionals, there are many water conservation strategies and best management practices that can be used in new construction and/or restoration. Here are some useful links to water conservation information:

  - Green Building Encyclopedia:
    http://www.whygreenbuildings.com/water_conservation.php

- Whole Building Design Guide:
  http://www.wbdg.org/resources/water_conservation.php

- Alliance for Water Efficiency:
  http://www.allianceforwaterefficiency.org/

- Water Use It Wisely – 100 Ways to Conserve:
  http://www.wateruseitwisely.com/100-ways-to-conserve/index.php

- Determining Energy Usage
  http://water.epa.gov/infrastructure/sustain/energy_use.cfm

- **Green Building in Federal Agency Projects**
  The *Federal Green Construction Guide for Specifiers* includes helpful information for procuring green building products and construction/renovation services within the Federal government:
  http://www.wbdg.org/design/greenspec.php

- **Use Environmentally Preferable Purchasing**
  Promote markets for environmentally preferable products by referencing EPA's multi-attribute Environmentally Preferable Purchasing guidance. Products and services include: Building and Construction, Carpets, Cleaning, Electronics, Fleets, Food Services, Landscaping, Meetings and Conferences, Office Supplies, and Paper.
  http://www.epa.gov/epp

- **Purchase 'green' electronics, and measure their benefits**
  Require the purchase of desktop computers, monitors, and laptops that are registered as Silver or Gold products with EPEAT, the Electronics Product Environmental Assessment Tool at www.epeat.net. Products registered with EPEAT use less energy, are easier to recycle, and can be more easily upgraded than non-registered products. Energy savings, CO_2 emission reductions, and other environmental benefits achieved by the purchase, use and recycling of EPEAT-registered products can be quantified using the Electronics Environmental Benefits Calculator:
  http://eerc.ra.utk.edu/ccpct/eebc/eebc.html

  http://www.energystar.gov/index.cfm?c=products.pr_find_es_products

- **Consider Low Impact Development to help manage storm water**
  Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product.

  Implement site planning, design, construction, and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the building site with regard to the temperature, rate, volume, and duration of flow.

  Additional information: http://www.epa.gov/nps/lid
  http://water.epa.gov/infrastructure/greeninfrastructure/
  http://www.epa.gov/nrmrl/wswrd/wq/models/swc/

- **Evaluate sustainable storm water management at brownfield sites**

Consider designs for storm water management on compacted, contaminated soils in dense urban areas:

Additional information: http://www.epa.gov/brownfields/tools/swdp0408.pdf

- **Alternative and Renewable Energy**
  The Department of Energy's "Green Power Network" (GPN) provides information and markets that can be used to supply alternative generated electricity. The following link identifies several suppliers of renewable energy:

  Additional information:
  http://apps3.eere.energy.gov/greenpower/buying/buying_power.shtml?

- **Clean Diesel**

  For new equipment utilize contract specifications requiring advanced pollution controls and clean fuels: http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf and http://www.epa.gov/cleandiesel/technologies/index.htm

  Implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:

  1. Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits; and
  2. Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.

  Additional information: *A How To Guide for Diesel Engine Retrofits in the Construction Industry*: http://www.mass.gov/dep/air/diesel/conretro.pdf

- **Utilizing recycled materials in construction projects**
  Many industrial and construction byproducts are available for use in road, building or infrastructure construction. Use of these materials can save money and reduce environmental impacts. The Recycled Materials Resource Center has developed user guidelines for many recycled materials and compiled existing national specifications.

  Additional information: http://rmrc.wisc.edu
  http://www.fhwa.dot.gov/pavement/recycling/rectools.cfm
  http://www.epa.gov/osw/conserve/imr/index.htm

- **Encourage cost-efficient, environmentally friendly landscaping**
  EPA's GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping. Designed to help preserve natural resources and prevent waste and pollution, GreenScapes encourages companies, government agencies, other entities, and homeowners to make more holistic decisions regarding waste generation and disposal and the associated impacts on land, water, air, and energy use.

  Additional information: http://www.epa.gov/wastes/conserve/tools/greenscapes/index.htm

- **Incorporate on-site energy generation and energy efficient equipment upgrades into projects at drinking water and wastewater treatment facilities**

Consider using captured biogases in combined heat and power systems, and renewable energy (wind, solar, etc.) to generate energy for use on-site. Evaluate the potential energy savings associated with upgrading to more energy efficient equipment (pumps, motors, lighting, etc.).

Additional information: http://water.epa.gov/infrastructure/sustain/goinggreen.cfm
http://www.epa.gov/region9/waterinfrastructure/howto.html

- **Incorporate green practices into remediation of contaminated sites**
  Encourage or incentivize the use of green remediation practices, including designing treatment systems with optimum energy efficiency; use of passive energy technologies such as bio-remediation and phyto-remediation; use of renewable energy to meet power demands of energy-intensive treatment systems or auxiliary equipment; use of cleaner fuels, machinery, and vehicles; use of native plant species; and minimizing waste and water use.

  Additional information: http://cluin.org/greenremediation/index.cfm

- **Encourage development in brownfield sites**
  Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. These sites are often "infrastructure-ready," eliminating the need to build new roads and utility lines which are necessary in undeveloped land.

  Additional information: http://www.epa.gov/brownfields/

- **Encourage use of Smart Growth and transit-oriented development principles**
  Smart Growth and transit oriented development (TOD) principles help preserve natural lands and critical environmental areas, and protect water and air quality by encouraging developments that are mixed-use, walkable and located near public transit. Encourage use of bicycling with bike commuter parking, storage, and changing facilities. Facilitate increased carpooling or alternative vehicles with preferable parking spaces and/or electric vehicle plug in spots.

  Additional information: http://www.epa.gov/smartgrowth

- **Integrated Design Process**
  The Integrated Design Process calls for the active and continuing engagement of all stakeholders *throughout* the building design, development, construction, and post-construction phases including the owners, architects, engineers, building department officials, and others. This process creates a higher-performing building at lower cost, allows various building systems to work together to eliminate redundant and unnecessary capacity, and minimizes change order costs.

  Additional information: http://www.wbdg.org/design/engage_process.php